

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee : Trumpf Photonics, Inc.
Patent No. : 5,818,860
Application No. : 08/757,883
Issue Date : October 6, 1998
Filing Date : November 27, 1996
Title : HIGH POWER SEMICONDUCTOR LASER DIODE

Commissioner for Patents
Washington, D.C. 20231

DECLARATION PURSUANT TO 37 C.F.R. §1.175

We, Dmitri Zalmanovich Garbuzov, Joseph Hy Abeles, and John Charles Connolly, declare that we believe we are the original and first inventors of the subject matter that is described and claimed in United States Patent No. 5,818,860 (the "'860 patent") for which we solicit a reissue patent; that we have reviewed and understand the contents of the enclosed reissue application, including its specification and claims; that we acknowledge the duty to disclose all information of which we are aware that is material to the examination of this reissue application in accordance with 37 CFR §1.56(a); that the '860 patent is partly inoperative by reason of claiming more than we had the right to claim; and that the inoperativeness is a result of error that arose inadvertently and without deceptive intention.

The errors that are the basis for this reissue application, and the resulting partial inoperativeness of the '860 patent, arose without deceptive intention and can be summarized as follows. After issuance of the '860 patent, we realized that several references, which were not part of the file wrapper, may be material to the validity of at least some of the claims of the '860 patent. We believe it was an error that these references were not considered by the patent Office during prosecution of the application that matured into the '860 patent.

Please address communications to:

J. Peter Fasse
Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804

Please address all telephone calls to:

J. Peter Fasse
Telephone: 617 542-5070

We declare that all statement made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this reissue application or any patents issued thereon.

Full name of inventor: DMITRI ZALMANOVICH GARBUZOV

Inventor's signature: Dmitri Zalmanovich Garbuzov

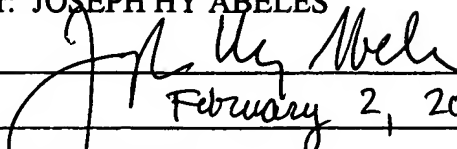
Date: 1-14-2004

Citizen of: United States of America _____

Residence: 19 Fleming Way, Princeton, New Jersey 08540, USA

Post Office Address: 19 Fleming Way, Princeton, New Jersey 08540, USA _____

Full name of inventor: JOSEPH HY ABELES

Inventor's signature: 

Date: February 2, 2004

Citizen of: United States of America

~~Residence: 42 Cedar Lane, Apt. D, Highland Park, NJ 08904~~

3 MUSKET COURT, EAST BRUNSWICK, NJ 08816

~~Post Office Address: 42 Cedar Lane, Apt. D, Highland Park, NJ 08904~~

3 MUSKET COURT, EAST BRUNSWICK, NJ 08816

Full name of inventor: JOHN CHARLES CONNOLLY

Inventor's signature:

Date:

Citizen of: United States of America

Residence: 5 Wright Court, Clarksburg, NJ 08510

Post Office Address: 5 Wright Court, Clarksburg, NJ 08510

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee : Trumpf Photonics, Inc.
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POWER OF ATTORNEY BY ASSIGNEE AND ELECTION OF
ASSIGNEE TO CONDUCT PROSECUTION TO EXCLUSION OF INVENTORS

The undersigned, as authorized representative of the assignee of the entire right, title and interest in the above-identified application, hereby appoints

Mark R.W. Bellermann, Reg. No. 47,419; James Babineau, Reg. No. 42,276; John F. Hayden, Reg. No. 37,640; J. Peter Fasse, Reg. No. 32,983, and Timothy A. French, Reg. No. 30,175.

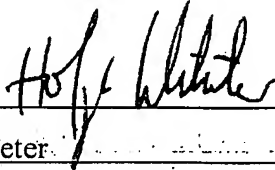
as its attorney or agent to prosecute the reissue application and to transact all business in the Patent and Trademark Office connected with the reissue application with full powers of substitution and revocation, the appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 CFR §3.71 *et seq.* of the Patent Office Rules of Practice.

Ownership is in the assignee by virtue of an assignment from Dmitri Zalmanovich Garbuzov, Joseph Hy Abeles, and John Charles Connolly, to DAVID SARNOFF RESEARCH CENTER, INC. recorded at Reel 8348, Frame 0547, and an assignment from SARNOFF CORPORATION to PRINCETON LIGHTWAVE, INC., recorded at Reel 012211, Frame 0112, and an assignment from PRINCETON LIGHTWAVE, INC. to TRUMPF PHOTONICS recorded at Reel 13515, Frame 0533, (copy enclosed). The documents evidencing ownership have been reviewed and to the best of the assignee's knowledge and belief, title is in the assignee.

Please direct all communications regarding the application to the attorney at the address and telephone numbers indicated below.

J. Peter Fasse
Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: 617 542-5070
Facsimile: 617 542-8906

Signature: _____



Typed name: Holger Schlueter

Title: Vice President & General Manager

Assignee: Trumpf Photonics, Inc.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee : Trumpf Photonics, Inc.
Patent No. : 5,818,860
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Commissioner for Patents
Washington, D.C. 20231

CONSENT OF ASSIGNEE AND OFFER TO SURRENDER

The undersigned, Trumpf Photonics, Inc., being assignee of all right, title and interest in and to the above-referenced U.S. Patent No. 5,818,860 by virtue of an assignment from Dmitri Zalmanovich Garbuzov, Joseph Hy Abeles, and John Charles Connolly, to DAVID SARNOFF RESEARCH CENTER, INC., recorded at Reel 8348, Frame 0547, and an assignment from SARNOFF CORPORATION to PRINCETON LIGHTWAVE, INC., recorded at Reel 012211, Frame 0112, and an assignment from PRINCETON LIGHTWAVE, INC. to TRUMPF PHOTONICS, recorded at Reel 13515, Frame 0533, (copy enclosed), hereby assents to the accompanying reissue application, and hereby offers to surrender U.S. Patent No. 5,818,860 and further requests that Letters Patent be reissued to it upon the foregoing amended application.

Trumpf Photonics, Inc.

Date: 10/9/2003

By: Hofschlueter

Name: Holger Schlueter

Title: Vice President & General Manager



UNITED STATES
PATENT AND
TRADEMARK OFFICE

CORRECTED
NOTICE

14564/00100/
JPF
JWB
006001

APRIL 29, 2003

FISH & RICHARDSON P.C.
JAMES W. BABINEAU
225 FRANKLIN STREET
BOSTON, MA 02110-2804

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

PTAS RECEIVED

MAY 05 2003

FISH & RICHARDSON, P.C.
BOSTON OFFICE

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/20/2002

REEL/FRAME: 013515/0533
NUMBER OF PAGES: 12

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
PRINCETON LIGHTWAVE, INC.

DOC DATE: 07/18/2002

ASSIGNEE:
TRUMPF PHOTONICS, INC.
2601 U.S. RTE. 130 S
CRANBURY, NEW JERSEY 08512

SERIAL NUMBER: 60133393
PATENT NUMBER:

FILING DATE: 05/10/1999
ISSUE DATE:

SERIAL NUMBER: 09468396
PATENT NUMBER: 6556611

FILING DATE: 12/20/1999
ISSUE DATE: 04/29/2003

SERIAL NUMBER: 09546086
PATENT NUMBER: 6459715

FILING DATE: 04/10/2000
ISSUE DATE: 10/01/2002

SERIAL NUMBER: 60089454
PATENT NUMBER:

FILING DATE: 06/16/1998
ISSUE DATE:

* No Docketing
Reviewed By Pract.
Initials <u>Ubb</u>

SERIAL NUMBER: 60132791
PATENT NUMBER:

FILING DATE: 05/06/1999
ISSUE DATE:

SERIAL NUMBER: 09566276
PATENT NUMBER:

FILING DATE: 05/05/2000
ISSUE DATE:

SERIAL NUMBER: 60164864
PATENT NUMBER:

FILING DATE: 11/12/1999
ISSUE DATE:

SERIAL NUMBER: 09710362
PATENT NUMBER:

FILING DATE: 11/10/2000
ISSUE DATE:

SERIAL NUMBER: 60129810
PATENT NUMBER:

FILING DATE: 04/16/1999
ISSUE DATE:

SERIAL NUMBER: 60161213
PATENT NUMBER:

FILING DATE: 10/22/1999
ISSUE DATE:

SERIAL NUMBER: 09571970
PATENT NUMBER:

FILING DATE: 05/16/2000
ISSUE DATE:

SERIAL NUMBER: 06176909
PATENT NUMBER: 4394938

FILING DATE: 08/11/1980
ISSUE DATE: 07/26/1983

SERIAL NUMBER: 09553551
PATENT NUMBER:

FILING DATE: 04/20/2000
ISSUE DATE:

SERIAL NUMBER: 60176913
PATENT NUMBER:

FILING DATE: 01/20/2000
ISSUE DATE:

SERIAL NUMBER: 09585032
PATENT NUMBER:

FILING DATE: 06/01/2000
ISSUE DATE:

SERIAL NUMBER: 60176915
PATENT NUMBER:

FILING DATE: 01/20/2000
ISSUE DATE:

SERIAL NUMBER: 60185133
PATENT NUMBER:

FILING DATE: 02/25/2000
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US9613820

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0012600

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0012708

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US9913568

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0012635

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0031048

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0010294

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0041425

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0041417

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0101971

FILING DATE:
ISSUE DATE:

SERIAL NUMBER:
PATENT NUMBER:
PCT NUMBER: US0101970

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10181467
PATENT NUMBER:
PCT NUMBER: US0102019

FILING DATE: 11/18/2002
ISSUE DATE:

SERIAL NUMBER: 10220897
PATENT NUMBER:
PCT NUMBER: US0106039

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 09571211
PATENT NUMBER: 6363188

FILING DATE: 05/16/2000
ISSUE DATE: 03/26/2002

SERIAL NUMBER: 09430643
PATENT NUMBER: 6301279

FILING DATE: 10/29/1999
ISSUE DATE: 10/09/2001

SERIAL NUMBER: 09158847
PATENT NUMBER: 6339606

FILING DATE: 09/23/1998
ISSUE DATE: 01/15/2002

SERIAL NUMBER: 08946180
PATENT NUMBER: 6034380

FILING DATE: 10/07/1997
ISSUE DATE: 03/07/2000

SERIAL NUMBER: 08524956
PATENT NUMBER: 5619523

FILING DATE: 09/08/1995
ISSUE DATE: 04/08/1997

SERIAL NUMBER: 08757883
PATENT NUMBER: 5818860

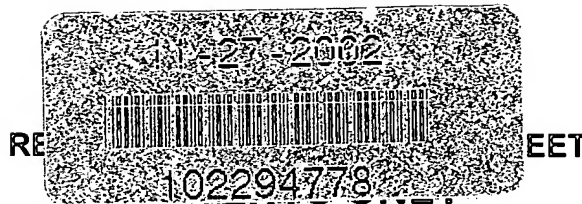
FILING DATE: 11/27/1996
ISSUE DATE: 10/06/1998

013515/0533 PAGE 4

SERIAL NUMBER: 07632263
PATENT NUMBER: 5131001

FILING DATE: 12/21/1990
ISSUE DATE: 07/14/1992

MAURICE CARTER, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Princeton Lightwave, Inc. <i>11-20-02</i> Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Trumpf Photonics Inc. 2601 U.S. Rte. 130 S Cranbury, NJ 08512 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: July 18, 2002	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): See Attached List B. Patent No(s): See Attached List Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: JAMES W. BABINEAU Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 7. Total fee (37 CFR §3.41): \$1,480.00 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> James W. Babineau Reg. No. 42,276 Name of Person Signing <i>[Signature]</i> Signature <i>November 14, 2002</i> Date Total number of pages including coversheet, attachments and document: 12	

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11/26/2002 JRL:RJE 00000025 07632263

01 FC:0021

1480.00 CP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

November 14, 2002
Date of Deposit
[Signature]
Signature
Amy V. Armitage
Typed Name of Person Signing Certificate

**LIST OF PATENTS AND PATENT APPLICATIONS
ASSIGNED FROM PLI TO TRUMPF PHOTONICS**

TITLE	SARNOFF CASE NO.	INVENTOR(S)	APPLICATION NUMBER	FILING DATE	PATENT OR PUBL. NO.	ISSUE DATE	ORIGIN
1. Monolithic Semiconductor Light Emitter and Amplifier	10579	Carlson	07/632,263	12/21/1990	5,131,001	7/14/1992	US
2. High Power Semiconductor Laser Diode	11611	Abeles Connolly Garbuzov	08/757,883	11/27/1996	5,818,860	10/6/1998	US
3. Semiconductor Distributed Feedback Laser Diode	11698	Abeles Connolly Morris	08/524,956	9/8/1996	5,619,523	4/8/1997	US
Semiconductor Distributed Feedback Laser Diode	11698	Abeles Connolly Morris	PCT/US96/13820	9/9/1996	WO 97/09760		WO/ PCT
4. Electroluminescent Diode with Mode Expander	11961	Alphonse Andrews Menna	08/946,180	10/7/1997	6,034,380	3/7/2000	US
Wide Stripe Distributed Bragg Reflector Lasers with Improved Angular and Spectral Characteristics	12709	Connolly DiMarco Garbuzov Khalfin	60/133,393	5/10/1999			US
			09/468,396	12/20/1999			
Wide Stripe Distributed Bragg Reflector Lasers with Improved Angular and Spectral Characteristics	12709	Connolly DiMarco Garbuzov Khalfin	PCT/US00/12600	5/10/2000	WO 00/72409		WO/ PCT

CONTINUATION OF ITEM 4

TITLE	SARNOFF CASE NO.	INVENTOR(S)	APPLICATION NUMBER	FILING DATE	PATENT OR PUBL. NO.	ISSUE DATE	ORIGIN
Master Oscillator Granting Coupled Power Amplifier with Angled Amplifier Section	12709A	Connolly DiMarco Garbuzov Khalfin	09/546,086	4/10/2000			US
Master Oscillator Granting Coupled Power Amplifier with Angled Amplifier Section	12709A	Connolly DiMarco Garbuzov Khalfin	PCT/US00/12708	5/10/2000	WO 00/72450		WO/ PCT
High Power Semiconductor Light Source	12797	Alphonse	60/089,454	6/16/1998			US
			09/158,847	9/23/1998	6,339,606	1/15/2002	
High Power Semiconductor Light Source	12797	Alphonse	PCT/US99/13568	6/16/1999	WO 99/66613		WO/ PCT
Mode Matching in Super Luminescent Diode Cavities	12977	Burstyn Shapiro Riddle Lurie	60/132,791	5/6/1999			US
Phase Conjugating Structure for Mode Matching in Super Luminescent Diode Cavities			09/566,276	5/5/2000			
Phase Conjugating Structure for Mode Matching in Super Luminescent Diode Cavities	12977	Burstyn	PCT/US00/12635	5/8/2000	WO 00/68720		WO/ PCT
Method for Controlling Current Spreading in Semiconductor Laser Diodes	13206	Connolly DiMarco	60/164,864	11/12/1999			US
			09/710,362	11/10/2000			

005001 ✓

005W01 ✓

009 ✓
non-4
have file

009001

009W01 ✓

010 ✓
don't
have

010001 ✓

010W01 ✓

011 ✓
don't
have

011001 ✓

CONTINUATION OF ITEM 4

TITLE	SARNOFF CASE NO.	INVENTOR(S)	APPLICATION NUMBER	FILING DATE	PATENT OR PUBL. NO.	ISSUE DATE	ORIGIN
Control of Current Spreading in Semiconductor Laser Diodes	13206	Connolly DiMarco	PCT/US00/31048	11/10/2000	WO 01/35506		WO/ PCT
Semiconductor Diode Lasers with Thermal Sensor Control of the Active Region Temperature	13505	Garbuzov Maiorov Khalfin Connolly	60/129,810	4/16/1999			US
			09/430,643	10/29/1999	6,301,279	10/9/2001	
Semiconductor Diode Lasers with Thermal Sensor Control of the Active Region Temperature	13505	Garbuzov Maiorov Khalfin Connolly	PCT/US00/10294	4/17/2000	WO 00/65699		WO/ PCT
Integrated High Power Semiconductor Laser	13764	Alphonse	60/161,213	10/22/1999			US
			09/571,970	5/16/2000			
Integrated High Power Semiconductor Laser	13764	Alphonse	PCT/US00/41425	10/23/2000	WO 01/39341		WO/ PCT
Mode Expander with Co-Directional Grating	13764A	Alphonse	09/571,211	5/16/2000	6,363,188	3/26/2002	US
Mode Expander with Co-Directional Grating	13764A	Alphonse	PCT/US00/41417	10/23/2000	WO 01/29590		WO/ PCT
Semiconductor Diode Lasers with Improved Beam Divergence	13858	Garbuzov Khalfin Connolly	60/176,909	1/20/2000			US
			09/553,551	4/20/2000			
Semiconductor Diode Lasers with Improved Beam Divergence	13858	Garbuzov Khalfin Connolly	PCT/US01/01971	1/19/2001	WO 01/57974		WO/ PCT

6.

7.

CONTINUATION OF ITEM 4

TITLE	SARNOFF CASE NO.	INVENTOR(S)	APPLICATION NUMBER	FILING DATE	PATENT OR PUBL. NO.	ISSUE DATE	ORIGIN
High-Power Single Mode Semiconductor Laser Diode	13860	Garbuzov Khalfin	60/176,913	1/20/2000			US
			09/585,032	6/1/2000			
High-Power Single Mode Semiconductor Laser Diode	13860	Garbuzov Khalfin	PCT/US01/01970	1/19/2001	WO 01/57973		WO/ PCT
Channelizer Switch; High Power Distributed Feedback Ridge Waveguide Laser; Resonant Enhanced Modulator (REM)	13869; 13870; 13871	Abeles	60/176,915	1/20/2000			US
High Power Distributed Feedback Ridge Waveguide Laser	13870	Abeles	PCT/US01/02019	1/22/2001	WO 01/54240		WO/ PCT
Double-Pass High Power Superluminescent Diode (SLD) And Optical Amplifier With Mode Stabilization	13922	Abeles	60/185,133	2/25/2000			US
Multi-Pass, Arcuate Bent Waveguide, High Power Superluminescent Diode	13922	Abeles	PCT/US01/06039	2/23/2001	WO 01/63331		WO/ PCT

EXHIBIT B

ASSIGNMENT

WHEREAS, Princeton Lightwave, Inc. **ASSIGNOR**, a Delaware corporation, is the owner of the entire right, title, and interest in the patents and patent applications listed on Schedule I attached hereto (collectively referred to as the "**Previously Assigned Patents and Patent Applications**"), subject to the May 2000 License Agreement (as defined below);

WHEREAS, The Sarnoff Corporation, a Delaware corporation ("**Sarnoff Delaware**"), and **ASSIGNOR**, pursuant to a TECHNOLOGY AND PATENT LICENSE AGREEMENT executed by Sarnoff New Jersey and **ASSIGNOR** and dated May 5, 2000 and an AMENDMENT TO TECHNOLOGY AND PATENT LICENSE AGREEMENT executed by Sarnoff New Jersey and **ASSIGNOR** and dated July 18, 2002 (collectively the "**May 2000 License Agreement**"), previously entered into assignments of the Previously Assigned Patents and Patent Applications;

WHEREAS, Sarnoff Corporation, a New Jersey corporation ("**Sarnoff New Jersey**"), possessed a legal interest in the Previously Assigned Patents and Patent Applications;

WHEREAS, the parties intend to ensure the proper assignment of the Previously Assigned Patents and Patent Applications such that Trumpf Photonics, Inc., **ASSIGNEE**, a Delaware corporation, may acquire the entire right, title, and interest in, to and under the Previously Assigned Patents and Patent Applications;

WHEREAS, in order to ensure such proper assignment, by separate written agreement Sarnoff New Jersey assigned to **ASSIGNOR** the entire, right, title, and interest in, to and under the Previously Assigned Patents and Patent Applications, subject to the May 2000 License Agreement;

WHEREAS, **ASSIGNEE** is desirous of obtaining the entire right, title and interest in, to and under the Previously Assigned Patents and Patent Applications, subject to the May 2000 License Agreement;

AND WHEREAS, it is desired that the assignment of these Previously Assigned Patents and Patent Applications be made a matter of record in the appropriate domestic and international patent offices;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, PLI hereby assigns and transfers unto Trumpf and its successors and assigns, the entire right, title and interest in and to the Previously Assigned Patents and Patent Applications (including the inventions disclosed therein and any divisions, continuations, reissues, reexaminations, extensions or foreign counterparts thereof) together with all rights of action and recovery for past infringement thereof, subject to the May 2000 License Agreement;

AND ASSIGNOR HEREBY authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said **ASSIGNEE**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

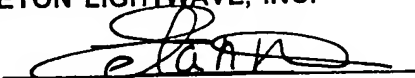
AND ASSIGNOR HEREBY further covenants and agrees that **ASSIGNOR** shall execute and deliver such documents and take such actions, at **ASSIGNEE's** expense, as are reasonably necessary or appropriate to effect this assignment of the Previously Assigned Patents and Patent Applications.

[PAGE BELOW INTENTIONALLY LEFT BLANK, SIGNATURE PAGE TO FOLLOW]

IN TESTIMONY WHEREOF, each party has caused its authorized representative to execute this Assignment (Exhibit B) as of July 3, 2002 (the "*Effective Date*").

PRINCETON LIGHTWAVE, INC.

BY



Name Didier Le Lannic

Title President and Chief

Executive Officer

TRUMPF PHOTONICS, INC.

BY

Name

Title

[SIGNATURE PAGE TO EXHIBIT B -ASSIGNMENT AND COVENANT NOT TO SUE
AGREEMENT]

IN TESTIMONY WHEREOF, each party has caused its authorized representative to execute this Assignment (Exhibit B) as of July 12, 2002 (the "Effective Date").

PRINCETON LIGHTWAVE, INC.

BY _____

Name _____

Title _____

TRUMPF PHOTONICS, INC.

BY Peter Leibinger

Name Peter Leibinger

Title President

[SIGNATURE PAGE TO EXHIBIT B -ASSIGNMENT AND COVENANT NOT TO SUE
AGREEMENT]

SCHEDULE 1 TO EXHIBIT B OF ASSIGNMENT AND COVENANT NOT TO SUE AGREEMENT
(Previously Assigned Patents and Patent Applications)

TITLE	INVENTORS	PATENT OR PUB NO.	APPLICATION NO.	FILING DATE	ISSUE DATE	PLI CASE NO.
Monolithic Semiconductor Light Emitter and Amplifier	Carlson	US 5,131,001	07/632,263	12/21/1990	7/14/1992	10579
High Power Semiconductor Laser Diode	Abeles, Connolly, Garbuzov	US 5,818,860	08/757,883	11/27/1996	10/6/1998	11611
		JP 10-303500	9-363805	11/27/1997		
Semiconductor Distributed Feedback Laser Diode	Abeles, Connolly, Morris	US 5,619,523	08/524,956	9/8/1995	4/8/1997	11698
		WO 97/09760	PCT/US96/13820	9/9/1996		
Electroluminescent with Diode Mode Expander	Alphonse, Andrews, Menna	US 6,034,380	08/946,180	10/7/1997	3/7/2000	11961
Electroluminescent with Diode Mode Expander		CA 2245399	2245399	8/20/1998		11961 CA
Semiconductor Diode		EP 908959	98307504.5	9/16/1998		11961 EP
Electroluminescent with Diode Mode Expander		JP 11-214745	10-285363	10/7/1998		11961 JP
Wide Stripe Distributed Bragg Reflector Lasers with Improved Angular and Spectral Characteristics	Connolly, DiMarco, Garbuzov, Khalfin	US Prov	60/133,393	5/10/1999	NA	
		US App	09/468,396	12/20/1999		12709
		AU 7049800	200070498	5/10/2000		
		WO 00/72409	PCT/US00/12600	5/10/2000		12709
Master Oscillator Granting Coupled Power Amplifier with Angled Amplifier Section	Connolly, DiMarco, Garbuzov, Khalfin	US App	09/546,086	4/10/2000	Allowed	12709A
		AU 7049900	200070499	5/10/2000		
		WO 00/72450	PCT/US00/12708	5/10/2000		12709A
High Power Semiconductor Light Source	Alphonse	US Prov	60/089,454	6/16/1998	NA	
		US 6,339,606	09/158,847	9/23/1998	1/15/2002	12797
		EP 1121720	99928706.3	6/16/1999		12797 EP
		JP	2000-555342	6/16/1999		12797 JP
		WO 99/66613	PCT/US99/13568	6/16/1999		12797 PCT

TITLE	INVENTORS	PATENT OR PUB NO.	APPLICATION NO.	FILING DATE	ISSUE DATE	PLI CASE NO.
Mode Matching in Super Luminescent Diode Cavities	Burstyn, Shapiro, Riddle, Lurie	US Prov	60/132,791	5/6/1999	NA	12977
Phase Conjugating Structure for Mode Matching in Super Luminescent Diode Cavities	Burstyn [Shapiro, Riddle, Lurie]	US App	09/566,276	5/5/2000		12977
	Burstyn	AU 4831200	200048312	5/8/2000		
	Burstyn	WO 00/68720	PCT/US00/12635	5/8/2000		12977 PCT
Method for Controlling Current Spreading in Semiconductor Laser Diodes	Connolly, DiMarco	US Prov	60/164,864	11/12/1999	NA	13206
		US App	09/710,362	11/10/2000		
Control of Current Spreading in Semiconductor Laser Diodes		AU 1762601	200117626	11/10/2000		
		WO 01/35506	PCT/US00/31048	11/10/2000		
Semiconductor Diode Lasers with Thermal Sensor Control of the Active Region Temperature	Garbuzov, Maiorov, Khalfin, Connolly	US Prov	60/129810	4/16/99		
		US 6,301,279	09/430,643	10/29/1999	10/9/2001	13505
		AU 6888000	200068880	4/17/2000		
		CA	2370788	4/17/2000		13505 CA
		EP	00957229.8	4/17/2000		13505 EP
		EP 1173907		4/17/2000		
		WO 00/65699	PCT/US00/10294	4/17/2000		13505 PCT
Integrated High Power Semiconductor Laser	Alphonse	US Prov	60/161,213	10/22/1999	NA	13764
		US App	09/571,970	5/16/2000		13764
		AU 4503301	200145033	10/23/2000		
		TW	89122242	10/23/2000		13764 TW
		WO 01/39341	PCT/US00/41425	10/23/2000		13764 PCT
Mode Expander with Co-Directional Grating	Alphonse	US 6,363,188	09/571,211	5/16/2000	3/26/2002	13764A
		AU 2299201	200122992	10/23/2000		
		TW	89122242	10/23/2000		13764A TW
		WO 01/29590	PCT/US00/41417	10/23/2000		13764A PCT
Semiconductor Diode Lasers with Improved Beam	Garbuzov, Khalfin,	US Prov	60/176,909	1/20/2000	NA	
		US App	09/553,551	4/20/2000		13858

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Divergence	Connolly	WO 01/57974	PCT/US01/01971	1/19/2001		13858 PCT
High-Power Single Mode Semiconductor Laser Diode	Garbuzov, Khalfin	US Prov	60/176,913	1/20/2000	NA	13860
		US App	09/585,032	6/1/2000		
		WO 01/57973	PCT/US01/01970	1/19/2001		
Channelizer Switch**	Abeles	US Prov	60/176,915	1/20/2000	NA	13869
High Power Distributed Feedback Ridge Waveguide Laser		AU 4719201	200147192	1/22/2001		13870
		WO 01/54240	PCT/US01/02019	1/22/2001		
Double-Pass High Power Superluminescent Diode (SLD) And Optical Amplifier with Mode Stabilization	Alphonse	US Prov	60/185,133	2/25/2000	NA	13922
Multi-Pass, Arcuate Bent Waveguide, High Power Superluminescent Diode		WO 01/63331	PCT/US01/06039	2/23/2001		13922

**Inventions in this provisional will be assigned only to the extent that Case No. 13870 claims priority of an invention in the provisional.